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T O P S E C R E T

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1. IN VIEW OF THE EXTENSIVE INTEREST IN THE CONFIGURATION

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OF THE MISSILE(S) AND ASSOCIATED RADARS FOUND AT THE SARY  
SHAGAN ANTIMISSILE TEST CENTER AND DEPLOYED PROBABLE LONG  
RANGE SAM COMPLEXES THE FOLLOWING SUMMARY BASED ON CONTINUING  
ANALYSIS HAS BEEN PREPARED:

A. AS INTERPRETED FROM KEYHOLE PHOTOGRAPHY, THE RADAR IS  
BELIEVED TO CONSIST OF A NON-SYMMETRICAL ARRANGEMENT OF MULTIPLE  
COMPONENTS WHICH INCLUDE THE FOLLOWING:

(1) A LARGE PROBABLE REFLECTOR MOUNTED TO THE RIGHT AND A  
SMALLER PROBABLE REFLECTOR MOUNTED TO THE LEFT OF A BULKY PROBABLE  
FEED STRUCTURE;

(2) AN UNIDENTIFIED ELEMENT END-MOUNTED ON THE PROBABLE  
FEED STRUCTURE;

(3) AN UNIDENTIFIED ELEMENT ATTACHED OUTBOARD OF AND BELOW  
THE LEFT REFLECTOR BY MEANS OF STRUTS OR BRACES;

(4) A REAR HOUSING.

B. THE HIGHEST PART OF THE RADAR, WHICH IS THE TOP OF THE  
RIGHT PROBABLE REFLECTOR, IS APPROXIMATELY 55 FEET ABOVE THE GROUND  
OR HARDSTAND UPON WHICH THE RADAR IS POSITIONED. THE RADAR'S  
OVERALL SPAN IS APPROXIMATELY 30 FEET FROM THE OUTER EDGE OF THE  
RIGHT PROBABLE REFLECTOR TO THE OUTER EDGE OF THE LEFT REFLECTOR  
AND THE APPROXIMATE DISTANCE FROM THE FRONT OF THE PROBABLE FEED  
STRUCTURE TO THE BACK OF THE REAR HOUSING IS 26 FEET. THE PROBABLE  
FEED STRUCTURE IS POSITIONED ABOUT 1/3 (ONE THIRD) OF THE DISTANCE  
FROM THE LEFT END OF THE RADAR. BOTH THE RIGHT AND LEFT REFLECTORS  
ARE PROBABLY CURVED IN THE HORIZONTAL AND VERTICAL PLANES ALTHOUGH

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THE AMOUNT OF CURVATURE CAN NOT BE DETERMINED.

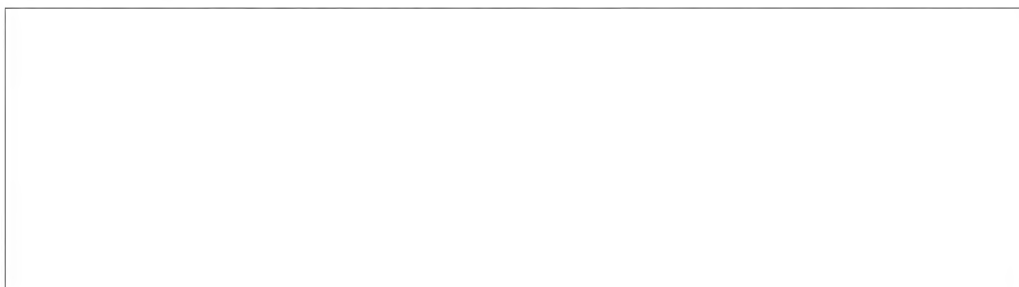
3. AS REGARDS THE MISSILES SEEN AT SARY-SHAGAN, ATTENTION IS INVITED TO NPIC PIR [REDACTED] DTD OCTOBER 1966, AND THE VARIOUS OAK REPORTS. CONTINUING ANALYSIS OF THE VARIOUS MISSILES IMAGED ON THE LARGER SCALE MISSIONS HAS NOT RESULTED IN ANY CHANGES TO THE ESTIMATE OF POSSIBILITIES SUGGESTED FOR CONSIDERATION ON PAGE 2 OF THE REFERENCED NPIC PIR, AND IN THE HIGHLIGHTS OF NPIC OAK 3, MISSION [REDACTED] HOWEVER, ADDITIONAL INFORMATION IS SUBMITTED FOR CONSIDERATION DURING FURTHER ANALYSIS OF THE PROBABLE LONG RANGE SAM SYSTEM.

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4. GENERALLY, THERE IS NO STRAIGHTFORWARD CONVERGENCE OF EVIDENCE REGARDING MISSILE CONFIGURATIONS. CERTAIN FEATURES ARE RELATIVELY PROMINENT WITH A MISSILE AT A GIVEN LOCATION BUT NOT CONSISTENTLY ON ALL MISSIONS. THE EVIDENCE INDICATES THAT, IF TWO DIFFERENT MISSILES ARE PRESENT, THEY HAVE APPEARED BOTH AT THE R AND D FACILITY (LAUNCH SITE 3) AND AT NEARBY PROBABLE LONG RANGE SAM LAUNCH COMPLEX 2, SSATC. THE FOLLOWING, PREVIOUSLY UNREPORTED FEATURES APPEAR AT BOTH LAUNCH COMPLEXES:

A. A SEPARATION EXISTS BETWEEN THE LAUNCHER RAIL AND THE SUSTAINER PORTION OF THE MISSILE, AS SEEN ON AT LEAST 4 OCCASIONS, AT THREE DIFFERENT LAUNCH SITES WHEN THE SUN ANGLE WAS IDEAL FOR SHADOW ANALYSIS. NOTE THE FOLLOWING:



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B. A CONNECTION (POSSIBLE SUPPORT BRACE) EXTENDS FROM THE END OF THE LAUNCHER RAIL TO THE MISSILE SUSTAINER IN THE FIRST THREE OF THE ABOVE LISTED EXAMPLES.

C. SHADOWS OF UNOCCUPIED LAUNCHERS SUGGEST THAT THE AFT PORTION OF THE LAUNCHER RAIL IS SLIGHTLY HIGHER THAN THE FORWARD SECTION. THIS CAN ALSO BE SEEN ON THE TARPAULIN COVERED POSSIBLE LAUNCHERS WHICH WERE PHOTOGRAPHED IN THE ENTUZIASTOV RAILROAD YARDS IN MOSCOW ON [REDACTED] CIA/PIR-71010, DTD OCTOBER 1966). THE PROBABLY ARTICULATED EXTENSION REFERRED TO AS A POSSIBLE BLAST DEFLECTOR APPEARS IN AN UP POSITION AT SARY SHAGAN LAUNCH POSITIONS (AND AT DEPLOYED LAUNCH SITES), HOWEVER, IT IS QUITE DIFFERENT FROM AN SA-2 BLAST DEFLECTOR, IF IT IN FACT SERVES SUCH A FUNCTION.

5. ONE OR MORE OF THE PROBABLE MOCK UP MISSILES NORTH OF POSITION 3, SITE 3 HAS ON AT LEAST TWO OCCASIONS GIVEN A DISTINCT IMPRESSION OF DELTA LIKE EXTENSIONS ALONG THE AFT SECTION OF THE MISSILE (SEE FIGURE 3, NPIC REPORT [REDACTED] HOWEVER, ON THE OTHER MISSIONS OF GENERALLY COMPARABLE QUALITY, THE EXTENSIONS CAN NOT BE IDENTIFIED, THOUGH THE AFT END HAS ALWAYS APPEARED MARKEDLY THICKER THAN THE FORWARD OR SUSTAINER SECTION. [REDACTED]

[REDACTED] REVEALS THESE TWO PROBABLE MOCK UP MISSILES NOW APPEAR TO BE OF THE SAME LENGTH, WITH ONE AGAIN GIVING AN IMPRESSION OF A DELTA LIKE EXTENSION. THE APPEARANCE OF A SIMILAR DELTA LIKE EXTENSION ON MISSILES AT LAUNCH SITES HAS NOT BEEN AS CLEAR, NEVERTHELESS, THERE IS AN INDICATION OF SUCH A CONFIGURATION IN THE FOLLOWING INSTANCES:

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A. [ ] PARTIALLY ERECTED ON LAUNCHER  
AT LAUNCH POSITION 5 LAUNCH SITE 3, COMPLEX A, WHERE THE SHADOW  
WAS THE ONLY EVIDENCE SUGGESTING THIS SHAPE.

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B. [ ] ON THE RIGHT MISSILE DOLLY AT  
LAUNCH POSITION 2 LAUNCH SITE A, COMPLEX 2, WHERE THE AFT END OF THE  
[ ] MISSILE HAS A DELTA LIKE EXTENSION, VISIBLE ONLY ON ONE  
OF THE TWO PHOTOGRAPHIC FRAMES. BOOSTERS, WHETHER CLUSTERED OR  
STRAPPED ON, CAN NOT BE IDENTIFIED, THOUGH THEIR PRESENCE CAN NOT  
BE NEGATED.

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C. [ ] ON THE LEFT MISSILE DOLLY AT  
LAUNCH POSITION 6, LAUNCH SITE 3, COMPLEX A, WHERE A [ ]  
MISSILE HAD AN INDICATION OF FIN LIKE STRUCTURES NEAR THE AFT END  
OF THE MISSILE. LACK OF SHADOW CONFIRMATION AND MONOSCOPIC COVERAGE  
PRECLUDE A MORE DEFINITE STATEMENT.

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6. ON PHOTOGRAPHY OF GENEALLY SIMILAR INTERPRETABILITY,  
MISSILES HAVE BEEN OBSERVED WITH NO INDICATION OF FINS OR DELTA  
LIKE EXTENSIONS, AND ON THE CONTRARY, HAVE ON ONE OCCASION APPEARED  
AS SHOWN IN FIGURE 1, OF NPIC [ ] INSTANCES OF GENERALLY  
SIMILAR MISSILES ARE:

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A. [ ] ON THE LAUNCHER AT LAUNCH  
POSITION 6, LAUNCH SITE B, COMPLEX 2, WHERE A [ ] MISSILE HAD  
A CONFIGURATION WHICH SUGGESTS EITHER STRAP-ON OR CLUSTERED BOOSTERS.  
A CANARD CAN NOT BE SEEN OR NEGATED.

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B. [ ] ON THE LAUNCHER AT LAUNCH  
POSITION 6, LAUNCH SITE 3, COMPLEX A, WHERE A 35 FOOT LONG MISSILE

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HAD A GENERALLY SIMILAR SHAPE, THOUGH INDIVIDUAL BOOSTER ELEMENTS  
COULD NOT BE DETECTED AS THEY WERE [REDACTED] A POSSIBLE  
CANARD CONFIGURATION COULD BE DETECTED IN THIS INSTANCE.

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C. [REDACTED] ON THE LAUNCHER AT LAUNCH  
POSITION 1, LAUNCH SITE A, COMPLEX 2, WHERE A MISSILE (APPROXIMATELY  
30 FEET LONG, IF HORIZONTAL) HAD A GENERALLY SIMILAR SHAPE TO THOSE  
DESCRIBED IN PARA 7A AND 7B ABOVE, HOWEVER, A CANARD WAS NOT DETECTED  
AND THE SHADOW CONFIGURATION WAS IN CONFLICT WITH THE APPARENT  
SHAPE OF THE MISSILE ITSELF. THE ANGLE OF THE SUN WITH REFERENCE  
TO THE LONGITUDINAL AXIS OF THE MISSILE WOULD TEND TO CREATE SOME  
DISTORTION, HOWEVER, IMAGE QUALITY AND UNKNOWN SLOPE OF THE GROUND  
ON WHICH THE SHADOW FALLS DOES NOT PERMIT FIRM CONCLUSIONS REGARDING  
THIS SHADOW.

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7. VARIATIONS IN LENGTH MUST BE CONSIDERED IN THE LIGHT OF  
MENSURAL CONFIDENCE FACTORS AND THE DIFFICULTY OF POINTING WITH  
ACCURACY.

S/C NOTE: NO PARA 2 INDICATED BY ORIGINATOR.

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T O P S E C R E T [REDACTED]

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--END OF MESSAGE--

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